```
ctgcgaccacgctcccaacccctgcatggagtgcggccaaaagtccctccacctacatcccgataccttcagccacc
tgagccgtcttgaaggcctggtgttgaaggacagttctctctcctggctgaatgccagttggttccgtgggctggga
aacctccgagtgctggacctgagtgagaacttcctctacaaatgcatcactaaaaccaaggccttccagggcctaac
acagctgcgcaagcttaacctgtccttcaattaccaaaagagggtgtcctttgcccacctgtctctggcccccttcct
tcgggagcctggtcgccctgaaggagctggacatgcacggcatcttcttccgctcactcgatgagaccacgctccgg
ccactggcccgcctgcccatgctccagactctgcgtctgcagatgaacttcatcaaccaggcccagctcggcatctt
cagggccttccctggcctgcgctacgtggacctgtcggacaaccgcatcagcggagcttcggagctgacagccacca
tgggggaggcagatggaggggagaaggtctggctgcagcctggggaccttgctccggccccagtggacactcccagc
tctgaagacttcaggcccaactgcagcaccctcaacttcaccttggatctgtcacggaacaacctggtgaccgtgca
gccggagatgtttgcccagctctcgcacctgcagtgcctgcgcctgagccacaactgcatctcgcaggcagtcaatg
gctcccagttcctgccgctgaccggtctgcaggtgctagacctgtcccgcaataagctggacctctaccacgagcac
tcattcacggagctaccgcgactggaggccctggacctcagctacaacagccagccctttggcatgcagggcgtggg
ccacaacttcagcttcgtggctcacctgcgcaccctgcgccacctcagcctggcccacaacaacatccacagccaag
tgtcccagcagctctgcagtacgtcgctgcgggccctggacttcagcggcaatgcactgggccatatgtgggccgag
ggagacctctatctgcacttcttccaaggcctgagcggtttgatctggctggacttgtcccagaaccgcctgcacac
cctcctgccccaaaccctgcgcaacctccccaagagcctacaggtgctgcgtctccgtgacaattacctggccttct
ttaagtggtggagcctccacttcctgcccaaactggaagtcctcgacctggcaggaaaccggctgaaggccctgacc
aatggcagcctgcctgctggcacccggctccggaggctggatgtcagctgcaacagcatcagcttcgtggcccccgg
cttcttttccaaggccaaggagctgcgagagctcaaccttagcgccaacgccctcaagacagtggaccactcctggt
ttgggcccctggcgagtgccctgcaaatactagatgtaagcgccaaccctctgcactgcgcctgtggggcggccttt
atggacttcctgctggaggtgcaggctgccgtgcccggtctgcccagccgggtgaagtgtggcagtccgggccagct
ccagggcctcagcatctttgcacaggacctgcgcctctgcctggatgaggccctctcctgggactgtttcgccctct
cgctgctggctgtggctctgggcctgggtgtgcccatgctgcatcacctctgtggctgggacctctggtactgcttc
cacctgtgcctggcctggcttccctggcgggggcggcaaagtgggcgagatgaggatgccctgccctacgatgcctt
cgtggtcttcgacaaaacgcagagcgcagtggcagactgggtgtacaacgagcttcgggggcagctggaggagtgcc
gtgggcgctgggcactccgcctgtgcctggaggaacgcgactggctgcctggcaaaaccctctttgagaacctgtgg
gcctcggtctatggcagccgcaagacgctgtttgtgctggcccacacggaccgggtcagtggtctcttgcgcgccag
cttcctgctggcccagcagcgcctgctggaggaccgcaaggacgtcgtggtgctggtgatcctgagccctgacggcc
gccgctcccgctacgtgcggctgcgccagcgcctctgccgccagagtgtcctcctctggccccaccagcccagtggt
cagcgcagcttctgggcccagctgggcatggccctgaccagggacaaccaccacttctataaccggaacttctgcca
gggacccacggccgaa
```

The highlighted and underlined portions of sequence shown above are discussed in the remarks below.

REMARKS

Claims 1-22, 26, 40, 44, 62, 80, 98, 114, and 120 were pending. No claims are amended. No claims are cancelled. No new matter is introduced.

In response to the Restriction Requirement, Applicants have elected to prosecute the claims of Group I. Applicants have also elected species TLR9 and the nucleic acid sequence encoding hTLR9-CXXCm, a full-length human TLR9 modified to include sequence encoding SEQ ID NO:147 as disclosed in Example 10. Having made this election, Applicants expressly reserve the right to file one or more divisional applications on the subject matter of the nonelected claims.

Applicants wish to thank the Examiner for the opportunity to discuss the sequence election in a telephone interview today. As agreed in that interview, because claim 13 in Group I depends from claim 5 in Group II, the Examiner has offered and agreed to include examination

of claim 5 upon election of Group I. As also agreed in the same telephone interview, the sequence election need not be drawn to a sequence assigned a SEQ ID NO or even expressly disclosed in its entirety in the specification, provided it is otherwise fully enabled.

Accordingly, Applicants have elected the 3096 base nucleotide sequence shown above, corresponding to a full-length cDNA open reading frame encoding hTLR9-CXXCm disclosed in Example 10, at pages 106-107 of the specification. The elected nucleic acid sequence encodes an isolated TLR9 polypeptide of claim 5 wherein the TLR9 polypeptide has an amino acid sequence identical to human TLR9 polypeptide except for the following amino acids which are derived from murine TLR9: 269, 270, 271, 272, 273, and 274.

As disclosed in Example 10, hTLR9-CXXCm was made by site-directed mutagenesis of human TLR9 DNA. A full-length cDNA sequence for native human TLR9 is disclosed in the specification as SEQ ID NO:4. Primers specified and used for making the site-directed mutation are disclosed in Example 10 as SEQ ID NOs 141 and 142. The sequence of SEQ ID NO:141 and its partial translation are shown below, where bold and underlined sequence is murine and remaining sequence is human:
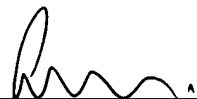
```
5'-c tgc atg gag tgc ggc caa aag tcc ctc cac cta cat ccc gat ac-3' SEQ ID NO:141
        C   M   E   C   G   Q   K   S   L   H   L   H   P   D
```

The site-directed mutation substitutes the murine sequence ggccaaaagtccctccac for the human sequence cctcgtcacttcccccag in SEQ ID NO:4.

Applicants wish to point out that a Request for Entry of Formal Drawings was filed February 10, 2003, in response to that part of Paper 17 setting forth a requirement for correction of drawings.

If the Examiner has any questions about the election, she is urged to contact Applicants' representative at the number shown below.

Respectfully submitted,
Bauer et al., Applicants

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